

BOOK REVIEW.

AGRICULTURE AND ECOLOGY IN AFRICA, by John Phillips. Faber, London, 1959. 412 pages with map. Price 63s.

At a time when Africa and the problems of its development and future are very much to the fore, it is most opportune that a general survey of the continent south of the Sahara should become available. As the subtitle, "A study of actual and potential development south of the Sahara", suggests, this book is much more than a picture of present conditions and practice. It deals also with trends, both advantageous and other, and with suggestions for the future. It is a challenging work that at times advocates policies not in accordance with the views of the powers that be.

At the present time agricultural production in Africa is low on any world standard. Indeed for considerable areas production is barely sufficient to provide subsistence for the inhabitants. Some of the reasons for this and suggestions for amelioration are dealt with. Throughout the book stress is laid on the very close relationship, in fact dependence, of agriculture in its widest sense on the complex of factors that form the climate and environment in any region. As natural vegetation is the most complete expression of the resultant of such factors, its understanding is the basis upon which all practice and development must be based. Hence the term "Ecology" in the title and the insistence all through on the necessity for an ecological approach to all agricultural problems. A lack of this has, as the author points out, led to failure in developmental schemes in the past. Some of these are analysed and the reasons for their success or failure considered. To avoid risk of failure it is emphasised that there must be first a study of the natural vegetation in any scheme for development or extension of agricultural activity. The use of a pilot scheme on a relatively small scale may make all the difference between success and failure and much more than repay the additional expense.

In this book there are continuous references to problems of human welfare and to economics in addition to those of agriculture itself.

When dealing with so large an area and one so much diversified, the treatment of any local region is necessarily short. Throughout stress is laid on the general underlying principles especially the factors that control the main divisions of the natural vegetation.

The volume is divided into five books:— (1) Scope and background; (2) The Forest bioclimatic region; (3) The great wooded savanna and

related regions: (4) Problems of human and animal health and economics; and (5) General conclusions and suggestions. From the botanical point of view the second and third of these are the most important and alone can be mentioned here. The natural vegetation which forms the basis of the whole argument, is divided into five main types or as they are termed "*bioclimatic regions*". These are Forest, Wooded Savanna, Desert and Semi-desert, Open Grassland, and Macchia. The distribution of these main divisions together with that of some of their chief sub-divisions are shown on the coloured map. Each bioclimatic region is subdivided into a number of divisions which are briefly described together with their main characteristics of climate and environment. These are also summarised in tabular form. For each division the major features of the soil are given, the effects of human activity, and a discussion of the potentialities for development. In addition under each is a reference to previous schemes of classification which is very useful in making comparisons simple.

The classification scheme has the advantage of great simplicity. As the map shows it also brings out a close relationship with the main divisions of the climate. It is, however, one so generalised that workers in any selected locality will almost certainly need more detailed subdivisions. In the text the various divisions are given symbols for shortness of reference. These are based on the initial letters of short descriptive titles. For example, the *Acacia* savanna of the eastern Cape Province is referred to as MSAWS-ST, that is "Mild sub-arid wood savanna—subtropical". Such symbols seem to be neither sufficiently self-explanatory nor sufficiently distinctive among themselves to warrant general acceptance.

It is easy, however, to criticise such minor points. As a whole there can be no doubt that this is an important work that should be studied by all interested in any way with development in Africa and its many problems. If some of the views advanced seem at first unorthodox they are based on scientific observation and deserve careful attention.

The volume has a full table of contents, an index, a list of references that extends to 16 pages. It is well printed and produced.

R. S. ADAMSON.